

AMENDMENTS TO THE CLAIMS

Cancel claims 1-4, 6-9, 11-14 and 21-24 without prejudice.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-4. (canceled)

5. (currently amended) ~~The method of claim 4, further comprising:~~

A method comprising:

determining a characteristic of a communication channel, wherein the communication channel includes a cable and the determined characteristic of the communication channel is an approximate length of the cable;

selecting, on the basis of the determined characteristic, a pre-computed equalizer characteristic for application to signals received via the communication channel, wherein the selecting includes selecting a pre-computed feed forward equalizer (FFE) from among a plurality of pre-computed FFEs stored in a receiver coupled to the communication channel;

applying the selected pre-computed FFE to the signals received via the communication channel; and

applying an adaptive FFE, in parallel with the selected pre-computed FFE, to the signals received via the communication channel.

6-9. (canceled)

10. (currently amended) ~~The apparatus of claim 9, wherein~~

An apparatus comprising:

a first circuit, to couple to a communication channel, to determine a characteristic of the communication channel, the communication channel including a cable, the first circuit to couple to the cable, the characteristic of the communication channel determined by the first circuit being an approximate length of the cable;

a second circuit, responsive to the first circuit, to select, on the basis of the determined characteristic, a pre-computed equalizer characteristic for application to signals received via the communication channel, the second circuit ~~includes~~ including circuitry to apply the selected pre-computed FFE to the signals received via the communication channel, wherein the second circuit stores a plurality of pre-computed feed forward equalizers (FFE) and is capable of selecting one of the stored pre-computed FFEs on the basis of a signal received from the first circuit; and

and further comprising:

a third circuit to apply an adaptive FFE, in parallel with the selected pre-computed FFE, to the signals received via the communication channel.

11-14. (canceled)

15. (currently amended) ~~The apparatus of claim 14, further comprising:~~

An apparatus comprising:

first means, for coupling to a communication channel and for determining a characteristic of the communication channel, the communication channel including a cable, the first means being for coupling to the cable, the characteristic of the communication channel determined by the first means being an approximate length of the cable;

second means, responsive to the first means, for selecting, on the basis of the determined characteristic, a pre-computed equalizer characteristic for application to signals received via the communication channel;

means for storing a plurality of pre-computed feed forward equalizers (FFE), wherein the second means includes means for selecting one of the stored pre-computed FFEs on the basis of a signal received from the first means;

means for applying the selected pre-computed FFE to the signals received via the communication channel; and

means for applying an adaptive FFE, in parallel with the selected pre-computed FFE, to the signals received via the communication channel.

16. (original) An apparatus comprising:

interface means for coupling to a cable;

storing means for storing a plurality of pre-computed feed forward equalizer (FFE) characteristics;

automatic gain control (AGC) means coupled to the interface means for applying gain control to signals received via the cable and for determining an approximate length of the cable;

selection means, coupled to the AGC means and to the storing means, for selecting one of the stored pre-computed FFE characteristics on the basis of a signal received from the AGC means, the signal received from the AGC means indicating the approximate length of the cable;

first equalizer means, responsive to the selection means and coupled to the interface means, for equalizing the signals received via the cable on the basis of the pre-computed FFE characteristic selected by the selection means; and

second equalizer means, coupled to the interface means in parallel with the first equalizer means, for adaptively equalizing the signals received via the cable.

17. (original) The apparatus of claim 16, wherein each of the pre-computed FFE characteristics stored by the storing means corresponds to a respective cable length.

18. (original) The apparatus of claim 17, wherein the storing means stores eight pre-computed FFE characteristics.

19. (original) The apparatus of claim 16, wherein the interface means is for coupling to an Ethernet cable.

20. (original) The apparatus of claim 16, wherein the interface means is for coupling to a Gigabit Ethernet cable.

21-24. (canceled)

25. (currently amended) ~~The system of claim 24, wherein~~

A system comprising:

a processor; and

a receiver coupled to the processor;

wherein the receiver includes:

a first circuit, to couple to a communication channel, to determine a characteristic of the communication channel, the communication channel including a cable, the first circuit to couple to the cable, the characteristic of the communication channel determined by the first circuit being an approximate length of the cable;

a second circuit, responsive to the first circuit, to select, on the basis of the determined characteristic, a pre-computed equalizer characteristic for application to signals received via the communication channel, the second circuit ~~includes~~ including circuitry to apply the selected pre-computed FFE to the signals received via the communication channel, wherein the second circuit stores a plurality of pre-computed feed forward equalizers (FFE) and is capable of selecting one of the stored pre-computed FFEs on the basis of a signal received from the first circuit; and

~~and wherein the receiver further includes:~~

a third circuit to apply an adaptive FFE, in parallel with the selected pre-computed FFE, to the signals received via the communication channel.

26. (new) The method of claim 5, wherein the approximate length of the cable is determined by an automatic gain control block.

27. (new) The apparatus of claim 10, wherein the first circuit comprises an automatic gain control circuit.

28. (new) The apparatus of claim 15, wherein the first means comprises an automatic gain control circuit.

29. (new) The system of claim 25, wherein the first circuit comprises an automatic gain control circuit.